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MEMC TP985751(2358.4)  
PATENT

CJC  
AJ

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Patent of Paolo Mutti et al.

Patent No. 6,726,764 B2

Issued April 27, 2004

Confirmation No. 5661

For METHOD FOR CONTROLLING GROWTH OF A SILICON CRYSTAL  
TO MINIMIZE GROWTH RATE AND DIAMETER DEVIATIONS

October 13, 2005

**LETTER TO THE PATENT AND TRADEMARK OFFICE**

Certificate  
OCT 19 2005  
of Correction

TO THE COMMISSIONER FOR PATENTS,

SIR:

The Certificate of Correction for the above-identified patent omits the corrected entry for Column 18, line 1. A copy of the Certificate of Correction as issued is attached along with a copy of the original request. As shown in the original request, the Certificate of Correction should read, with regard to Column 18, line 1:

Column 18.

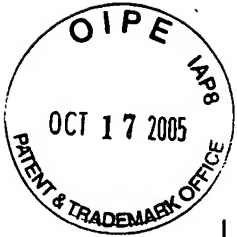
Line 1, " $r(t)=r_f+A[Y(h_f-h_s)x+(Y+h_fh_s)Z(x+1e^x)+Z^2(x+1.5-2e^{2x})]$ " should read  
--  $r(t)=r_f+A[Y(h_f-h_s)x+(Y+h_f-h_s)Z(x+1-e^x)+Z^2(x+1.5-2e^x+0.5e^{2x})]$  --.

Please issue a corrected Certificate of Correction for this patent.

Respectfully submitted,

Robert M. Bain, Reg. No. 36,736  
SENNIGER, POWERS, LEAVITT & ROEDEL  
One Metropolitan Square, 16th Floor  
St. Louis, Missouri 63102  
(314) 231-5400

OCT 25 2005



MEMC TP985751(2358.4)  
PATENT

CERTIFICATE OF MAILING

I hereby certify that the foregoing Letter to the Patent and Trademark Office in the patent of Paolo Mutti, Patent No. 6,726,764, issued April 27, 2004 is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Certificate of Corrections Branch, Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450 on this 14th day of October, 2005.



Darlene Pearman

RMB/dep  
\*Enclosure

UNITED STATES PATENT AND TRADEMARK OFFICE  
**CERTIFICATE OF CORRECTION**

PATENT NO. : 6,726,764 B2  
DATED : April 27, 2004  
INVENTOR(S) : Paolo Mutti and Vladimir V. Voronkov

Page 1 of 1

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Title page,

Item [75], Inventors, "Vladmir V. Voronknov" should read -- Vladimir V. Voronkov --

Column 13,

Line 44, "to the healer" should read -- to the heater --.

Column 14,

Line 18, " $\delta P = (V_{gs} V_{set}) / A_p$ ," should read --  $\delta P = -(V_{gs} - V_{set}) / A_p$ ; --.

Line 47, " $r(t) = r_f + A[Y(h_f h_s)x + (Y + h_f h_s)Z(x + 1 - e^x) - Z^2(x + 1.5 - 2e^x + 0.5e^{2x})]$ ," should read --  $r(t) = r_f + A[Y(h_f h_s)x + (Y + h_f h_s)Z(x + 1 - e^x) + Z^2(x + 1.5 - 2e^x + 0.5e^{2x})]$ ; --.

Line 49, " $Y = V_{gf} A_h$ ;  $Z = (V_p V_{gf}) / A_h$ ," should read --  $Y = V_{gf} / A_h$ ;

$Z = (V_p - V_{gf}) / A_h$ ; --.

Line 53, "interval:" should read -- interval; --.

Column 15,

Line 43, "puller as function of" should read -- puller as a function of --.

Column 16,

Line 53, " $\delta P = (V_{gs} V_{set}) / A_p$ ," should read --  $\delta P = -(V_{gs} - V_{set}) / A_p$ ; --.

Column 17,

Line 2, "growth rule" should read -- growth rate --.

Column 18,

Line 1, " $r(t) = r_f + A[Y(h_f h_s)x + (Y + h_f h_s)Z(x + 1 - e^x) + Z^2(x + 1.5 - 2e^x)]$ " should read



Signed and Sealed this

Ninth Day of August, 2005

JON W. DUDAS

Director of the United States Patent and Trademark Office



MEMC TP985751(2358.4)  
PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Patent of Paolo Mutti et al.

Patent No. 6,726,764 B2

Issued April 27, 2004

Confirmation No. 5661

For METHOD FOR CONTROLLING GROWTH OF A SILICON CRYSTAL  
TO MINIMIZE GROWTH RATE AND DIAMETER DEVIATIONS

May 17, 2004

**LETTER TO THE PATENT AND TRADEMARK OFFICE**

TO THE COMMISSIONER FOR PATENTS,

SIR:

On studying the above-identified patent, the following errors, apparently made in part by applicant and in part by the Patent and Trademark Office, were found (these errors are also noted on the attached form PTO-1050):

\*\* On the Face of the Patent, (75) Inventors: "Vladmir V. Voronknov" should read -- Vladimir V. Voronkov --.

In Column 13, claim 1, line 44, "to the healer" should read -- to the heater --.  
(See Amendment A, page 2, claim 1, line 21).

In column 14, claim 9, line 18, " $\delta P = (V_{gs} V_{set}) / A_p$ ," should read --  $\delta P = -(V_{gs} - V_{set}) / A_p$ ; --. (See Amendment A, page 4, claim 9, line 3).

In column 14, claim 13, line 47,  
" $r(t) = r_i + A[Y(h_i h_s)x + (Y + h_i h_s)Z(x + 1e^x) - Z^2(x + 1.5 - 2e^x + 0.5e^{2x})]$ ;" should read  
--  $r(t) = r_i + A[Y(h_i - h_s)x + (Y + h_i - h_s)Z(x + 1 - e^x) + Z^2(x + 1.5 - 2e^x + 0.5e^{2x})]$ ; --.  
(See Amendment A, page 4, claim 13, line 3).

In column 14, claim 13, line 49, " $Y=V_{gf}A_h$ ;  $Z=(V_pV_{gf})/A_h$ ;" should read  
--  $Y=V_{gf}/A_h$ ;  $Z=(V_p-V_{gf})/A_h$ ; --. (See Amendment A, page 5, claim 13, line 1).

In column 14, claim 13, line 53, "interval:" should read -- interval; --.  
(See Amendment A, page 5, claim 13, line 3).

\*\* In column 15, claim 20, line 43, "puller as function of" should read -- puller as a  
function of --.

In column 16, claim 28, line 53, " $\delta P=(V_{gs}V_{set})/A_p$ ;" should read  
--  $\delta P=-(V_{gs}-V_{set})/A_p$ ; -- (See Amendment A, page 8, claim 28, line 3).

In column 17, claim 30, line 2 "growth rule" should read -- growth rate --.  
(See Amendment A, page 9, claim 30, line 2).

In column 18, claim 31, line 1,  
" $r(t)=r_i+A[Y(h_i-h_s)x+(Y+h_ih_s)Z(x+1e^x)+Z^2(x+1.5-2e^{2x})]$ " should read  
--  $r(t)=r_i+A[Y(h_i-h_s)x+(Y+h_ih_s)Z(x+1-e^x)+Z^2(x+1.5-2e^x+0.5e^{2x})]$  --.  
(See Amendment A, page 9, claim 31, line 3).

#### REMARKS

Since the errors shown above marked with double asterisks were made by  
applicant, the \$100.00 fee required under Rule 1.323 is enclosed. We respectfully  
request that a certificate of correction be issued.

Respectfully submitted,



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St. Louis, Missouri 63102  
(314) 231-5400



MEMC TP985751(2358.4)  
PATENT

CERTIFICATE OF MAILING

I hereby certify that the foregoing Letter to the Patent and Trademark Office in the patent of Paolo Mutti, Patent No. 6,726,764, issued April 27, 2004 is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Certificate of Corrections Branch, Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450 on this 17th day of May, 2004.

Darlene Pearman  
Darlene Pearman

EJH/dep  
\*Enclosure

OCT 25 2005

UNITED STATES PATENT AND TRADEMARK OFFICE  
CERTIFICATE OF CORRECTION

PATENT NO. : 6,726,764  
DATED : April 27, 2004  
INVENTOR(S) : Paolo Mutti and Vladimir V. Voronkov

Page 1 of 2

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

On the Face of the Patent

(75) Inventors: "Vladimir V. Voronkov" should read -- Vladimir V. Voronkov --.

Column 13

Claim 1, line 44, "to the healer" should read -- to the heater --.

Column 14

Claim 9, line 18, " $\delta P = (V_{gs} V_{set}) / A_p$ ;" should read --  $\delta P = -(V_{gs} - V_{set}) / A_p$ ; --.

Claim 13, line 47, " $r(t) = r_i + A[Y(h_i h_s)x + (Y + h_i h_s)Z(x + 1e^x) - Z^2(x + 1.5 - 2e^x + 0.5e^{2x})]$ ;" should read --  $r(t) = r_i + A[Y(h_i - h_s)x + (Y + h_i - h_s)Z(x + 1 - e^x) + Z^2(x + 1.5 - 2e^x + 0.5e^{2x})]$ ; --.

Claim 13, line 49, " $Y = V_{gf} A_h$ ;  $Z = (V_p V_{gf}) / A_h$ ;" should read --  $Y = V_{gf} / A_h$ ;  $Z = (V_p - V_{gf}) / A_h$ ; --.

Column 14

Claim 13, line 53, "interval:" should read -- interval; --.

Column 15

Claim 20, line 43, "puller as function of" should read -- puller as a function of --.

Column 16

Claim 28, line 53, " $\delta P = (V_{gs} V_{set}) / A_p$ ;" should read --  $\delta P = -(V_{gs} - V_{set}) / A_p$ ; --.

MAILING ADDRESS OF SENDER:

Robert M. Bain  
Senniger, Powers, Leavitt & Roedel  
One Metropolitan Square, 16th Fl.  
St. Louis, Missouri 63102

PATENT NO. 6,726,764

No. of additional copies



This collection of information is required by 37 CFR 1.322, 1.323, and 1.324. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1.0 hour to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Attention Certificate of Corrections Branch, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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OCT 25 2005

# UNITED STATES PATENT AND TRADEMARK OFFICE

## CERTIFICATE OF CORRECTION

PATENT NO. : 6,726,764  
 DATED : April 27, 2004  
 INVENTOR(S) : Paolo Mutti and Vladimir V. Voronkov

Page 2 of 2

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 17

Claim 30, line 2 "growth rule" should read -- growth rate --.

Column 18

Claim 31, line 1, " $r(t)=r_i+A[Y(h_i-h_s)x+(Y+h_ih_s)Z(x+1e^x)+Z^2(x+1.5-2e^{2x})]$ " should read --  $r(t)=r_i+A[Y(h_i-h_s)x+(Y+h_ih_s)Z(x+1-e^x)+Z^2(x+1.5-2e^x+0.5e^{2x})]$  --.

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PATENT NO. 6,726,764

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